

ASSIGNMENT 4

Textbook Assignment: "Air Detachment Equipment Supervisor," "Crane Crew Supervisor," and "Projects Supervisor," pages 2-16 through 4-11.

Learning Objective: Recognize the air det responsibilities for projects, mount-out, and retrograde operations.

- 4-1. What is the primary function of the construction platoon?
1. To perform equipment operations
 2. To perform camp operations
 3. To perform construction operations
 4. To perform communication operations
- 4-2. The tailoring of ratings assigned to the air det is dependent upon the extent and variety of tasking.
1. True
 2. False
- 4-3. What person is responsible for developing a productive method for washing CESE for the mount-out?
1. Support platoon supervisor
 2. Air det operations chief
 3. Equipment platoon supervisor
 4. Air det embarkation officer
- 4-4. CESE preparation is a time-consuming event that must be properly planned in order to meet the deadline for the joint inspection.
1. True
 2. False

- 4-5. What governmental agency may require a de-bugging steam wash be conducted on all CESE?
1. The Department of Environmental protection
 2. The Department of Motor Vehicles
 3. The Department of Health and Welfare
 4. The Department of Agriculture
- 4-6. What does the acronym DACG mean?
1. Dependent Airlift Crew Group
 2. Deployment Airlift Construction Group
 3. Departure Airlift Construction Group
 4. Departure Airlift Control Group
- 4-7. What term identifies the period of time in which items are inventoried reordered, cleaned, and turned in?
1. BEEP
 2. Mount in
 3. Retrograde
 4. Return grade
- 4-8. The final condition of CESE and the positive accountability of collateral equipage and of tool kits determines your final grade in the successful management of air det CESE?
1. True
 2. False

Learning Objective: Recognize the responsibilities for the selection and training of crane crews in the NCF.

- 4-9. At least what percentage of crane accidents results from operator inattention, poor judgment, overconfidence, and/or excessive speed?
1. 70%
 2. 75%
 3. 80%
 4. 85%
- 4-10. Which of the following publications does NOT contain outline standards for weight-handling equipment?
1. NAVFAC P-307
 2. NAVFAC P-404
 3. NAVFAC P-405
 4. NAVFAC P-306
- 4-11. Which of the following supervisors must be designated in writing by the commanding officer?
1. Transportation
 2. Crane crew
 3. Projects
 4. Quarry
- 4-12. In an NMCB, at what time should the crane crew be selected?
1. At the beginning of the deployment
 2. At the beginning of the home-port period
 3. At the end of the home-port period
 4. During the BEEP
- 4-13. Crane operators assigned to the crane crew should have what characteristics?
1. Maturity and experience
 2. Experience and personality
 3. Maturity and education
 4. Education and personality
- 4-14. Crane operators must meet the minimum physical examination requirements as established by what NAVFAC publication?
1. P-415
 2. P-404
 3. P-306
 4. P-315
- 4-15. Before receiving a license to operate a crane, an operator must attend a minimum of how many hours of formal classroom training?
1. 8
 2. 24
 3. 32
 4. 40
- 4-16. What person in an NMCB has the direct responsibility for testing crane operators?
1. Crane test director
 2. Crane crew leader
 3. Certified crane supervisor
 4. Crane certifying officer
- 4-17. What person in an NMCB designates in writing the crane test mechanic?
1. Commanding officer
 2. Operations officer
 3. Crane certifying officer
 4. Crane test director
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- Learning Objective: Recognize the procedures for performing the BEEP of cranes.
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- 4-18. The weight testing of cranes is a time-consuming event and should be completed before the end of the BEEP.
1. True
 2. False

- 4-19. Which of the following personnel have the responsibility of performing the "before" "during," and "after" inspection of the crane?
1. Crane certifying officer
 2. Crane test operator
 3. Crane test mechanic
 4. Crane test rigger
- 4-20. When transporting a crane on the open road, you must avoid any power source by at least what distance?
1. 4 feet
 2. 10 feet
 3. 15 feet
 4. 20 feet
- 4-21. Which of the following personnel have the responsibility for completing the crane lift checklist?
1. Crane certifying officer
 2. Crane crew supervisor
 3. Crane crew rigger
 4. Crane crew operator
- 4-22. What is the minimum requirements for retaining ODCLs?
1. ODCLs from the past 90 days of operations and ODCLs of the current month
 2. ODCLs from the past 60 days of operations and ODCLs of the current month
 3. ODCLs from the previous month of operations and ODCLs of the current month
 4. ODCLs of the current month of operation
- 4-23. More than two broken wires in one lay in sections beyond the end connection is the condition for replacing what section of wire rope?
1. Wire rope connected to a wedge socket
 2. Boom pendant ropes
 3. Boom hoist ropes
 4. Wire rope connected to a winch
- 4-24. The use of a wedge socket develops only what percentage of the breaking strength of the wire rope?
1. 90%
 2. 80%
 3. 70%
 4. 60%
- 4-25. When should the crane hook block be magna-fluxed?
1. After 5 years of service
 2. After the crane has been released from deadline
 3. After any repairs performed on the hook block
 4. Every fifth certification
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- Learning Objective: Recognize the test procedures performed when weight-testing cranes.
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- 4-26. A mobile crane is weight-tested at what percentage of the rated capacity of the crane?
1. 100%
 2. 110%
 3. 115%
 4. 125%
- 4-27. When lifting a load that exceeds 75 percent of a crane's rated capacity, you should determine the operating radius in what manner?
1. By reading the boom angle indicator
 2. By actually measuring the operating radius
 3. By watching the boom pendant angle
 4. By reading the load chart
- 4-28. You are assigned to weight test a mobile crane. What is the test weight for a mobile crane with a rated capacity of 72,300 pounds?
1. 65,727 pounds
 2. 79,530 pounds
 3. 82,159 pounds
 4. 90,375 pounds

- 4-29. What is the safe working load of a 3/4-inch hoist wire rope?
1. 4.5 tons
 2. 6.0 tons
 3. 9.7 tons
 4. 10.4 tons
- 4-30. What is the breaking strength of a 3/4-inch hoist wire rope?
1. 22.5 tons
 2. 30.0 tons
 3. 48.5 tons
 4. 52.0 tons
- 4-31. What is the breaking strength of a 3/4-inch wire rope rigged with a wedge socket?
1. 36.4 tons
 2. 34.0 tons
 3. 21.0 tons
 4. 15.8 tons
- 4-32. What is the safety factor of a 3/4-inch wire rope used as rope that winds on drums or passes on sheaves?
1. 4.50 tons
 2. 6.00 tons
 3. 9.70 tons
 4. 10.4 tons
- 4-33. What is the test weight for a 3/4-inch wire rope rigged on a mobile crane?
1. 9,900 pounds
 2. 13,200 pounds
 3. 21,340 pounds
 4. 22,880 pounds
- 4-34. What percentage of crane capacity is lost when the crane has a short boom at maximum radius and is 3 degrees out of level?
1. 30%
 2. 20%
 3. 15%
 4. 10%
- 4-35. When conducting a maximum load test, you hold the load clear of the ground without the boom and load hoist pawls engaged for what time period?
1. 5 minutes
 2. 10 minutes
 3. 15 minutes
 4. 20 minutes
- 4-36. When conducting a dynamic test of the auxiliary hoist, you must wait what length of time after raising and lowering the test load before continuing the test?
1. 20 minutes
 2. 15 minutes
 3. 10 minutes
 4. 5 minutes
- 4-37. Cranes rigged for clamshell, dragline, or pile-driving operations should be weight-tested according to what factor?
1. The maximum capacity of the crane
 2. The minimum capacity of the crane
 3. The safe working load for the size of wire rope used
 4. The safe working load on the load charts
- 4-38. Retesting of the crane is required when changing from clamshell to dragline.
1. True
 2. False
- 4-39. At which of the following locations is the certification of load test and condition inspection filed?
1. Equipment history jacket
 2. Unit safety office
 3. Protective container on the crane
 4. All of the above

- 4-40. What is the most critical portion of the operation of a crane?
1. Moving the crane
 2. Setting up for a lift
 3. Rotating the crane
 4. Rigging for a lift
- 4-41. The rated capacities of mobile cranes are based on what factors?
1. Strength and sensibility
 2. Strength and mobility
 3. Strength and desirability
 4. Strength and stability
- 4-42. In an NMCB, which of the following personnel is NOT required to attend the biweekly crane operation and safety meetings?
1. Alfa company commander
 2. Crane test director
 3. Battalion safety chief
 4. Crane supervisor and operator
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- Learning Objective: Recognize the NCF wire rope sling and rigging hardware program.
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- 4-43. What person is responsible for the turnover of all slings and rigging hardware during the BEEP?
1. Crane test operator
 2. Crane certifying officer
 3. Crane crew rigger
 4. Crane crew supervisor
- 4-44. The factor of safety for wire rope slings is what ratio?
1. 5.0 to 1
 2. 3.5 to 1
 3. 3.0 to 1
 4. 4.0 to 1
- 4-45. The total weight of a load carried by a single-leg sling at 90 degrees is what type of sling?
1. Bridle hitch
 2. Choker hitch
 3. Double-vertical hitch
 4. Single-vertical hitch
- 4-46. The sling angle for a two-leg sling is at 30 degrees hoisting a 1,000-pound object. What total stress weight is each leg hoisting?
1. 500 pounds
 2. 750 pounds
 3. 1,000 pounds
 4. 1,500 pounds
- 4-47. If a thimble is not used in an eye of a wire rope, what percentage of efficiency of the connection is lost?
1. 5%
 2. 10%
 3. 15%
 4. 20%
- 4-48. When properly fabricated, which of the following eye splices develops almost 100 percent of the catalogue breaking strength of the wire rope?
1. Flemish eye and serving
 2. Flemish eye and pressed metal sleeve
 3. Tucked eye and serving
 4. Fold back eye and pressed metal sleeve
- 4-49. It is highly recommended that what eye splice never be used for overhead hoisting operations?
1. Flemish eye and serving
 2. Tucked eye and serving
 3. Fold back eye and pressed metal sleeve
 4. Tucked eye and pressed metal sleeve
- 4-50. What person is responsible for establishing and maintaining a card file system containing records of each sling in the unit's inventory?
1. Crane test director
 2. Crane crew rigger
 3. Crane crew mechanic
 4. Crane crew supervisor

- 4-51. A sling should be maintained on the crane at the end of each workday.
1. True
 2. False
- 4-52. Which of the following number of designators does NOT identify an NCF TOA slings and rigging gear kit?
1. 80104
 2. 84003
 3. 84004
 4. 80056
- 4-53. To avoid confusion and doubt, you may downgrade a sling to a lower capacity.
1. True
 2. False
- 4-54. What kit in the NCF TOA contains the tools and equipment necessary to fabricate 3/8-inch through 5/8-inch sizes of wire rope slings?
1. 80104
 2. 80107
 3. 80092
 4. 84004
- 4-55. At what periodic intervals should a visual inspection of all wire rope slings and rigging gear be performed?
1. Every 30 days
 2. Every 60 days
 3. Every 75 days
 4. Every 90 days
- 4-56. The recommended COMSECOND/COMTHIRDNCBINST wire rope lubricant is composed of what mixture?
1. 70% diesel to 30% used oil
 2. 70% diesel to 30% new oil
 3. 70% new oil to 30% gas
 4. 70% new oil to 30% diesel
- 4-57. What action is required when rigging gear becomes defective?
1. Downgrade the capacity
 2. Survey it through supply
 3. Destroy it by cutting it up
 4. Store it in the rigging loft
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- Learning Objective: Recognize the responsibilities of the project supervisor and the concepts of construction used in an NMCB.
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- 4-58. In an NMCB, what person has direct responsibility for the successful completion of all construction projects?
1. Commanding officer
 2. Operations officer
 3. Operations chief
 4. Project supervisor
- 4-59. In an NMCB, what officer has the direct supervisory authority over the utilization of the battalion's construction resources?
1. Executive officer
 2. Supply officer
 3. Embarkation officer
 4. Operations officer
- 4-60. Within the Alfa company organization, what person is responsible to A-6 for all prime and sub projects?
1. A-5
 2. A-4
 3. A-3
 4. A-32
- 4-61. In an NMCB, what person appoints project supervisors for assigned construction projects?
1. Company commander
 2. Operations officer
 3. Operations chief
 4. Projects chief

- 4-62. What person determines the organizational concept of construction used in an NMCB?
1. CO and S-3
 2. NAVFACENGCOM
 3. COMSECOND/COMTHIRDNCB
 4. Naval Construction Regiment
- 4-63. What is the most common construction concept used in the NCF?
1. Project manager/resource manager
 2. Prime contractor/lead company
 3. Self-sufficient unit/detail
 4. Prime company/lead contractor
- 4-64. What NAVFAC publication outlines the concepts of construction used in the NCF?
1. NAVFAC P-405
 2. NAVFAC P-404
 3. NAVFAC P-320
 4. NAVFAC P-315
- 4-65. At what step of deployment planning does the battalion receive preliminary tasking and begin monitoring the efforts of the on-site battalion?
1. Initial
 2. Detailed
 3. Follow on
 4. Follow-up
- 4-66. At what planning step are personnel assigned to details, companies, and staff billets?
1. Detailed
 2. Follow-up
 3. Initial
 4. Follow-on
- 4-67. What element assists companies and details with the planning effort and coordinates the detail analysis of project requirements?
1. Material liaison office
 2. Quality control element
 3. Material construction control
 4. Quality construction element
- 4-68. What areas are inspected during the first of the three phases of a readiness-to-deploy inspection?
1. Battalion organization and training plans
 2. CESE management plans
 3. Construction project plans
 4. Execution plans
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- Learning Objective: Recognize the steps performed to compute earthwork volumes.
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- 4-69. Mistakes made in P&E can be detrimental to the successful completion of a construction project.
1. True
 2. False
- 4-70. What total number of cubic feet equals 1 cubic yard?
1. 3
 2. 9
 3. 27
 4. 36
- 4-71. When calculating estimates from construction prints, you must remember that cuts are measured in what state?
1. Inplace cubic yards
 2. Compacted cubic yards
 3. Loose cubic yards
 4. Swell cubic yards
- 4-72. In road construction, what is the name of the slope that extends from the outside of the shoulder to the bottom of the ditch?
1. Foreslope
 2. Sideslope
 3. Backslope
 4. Frontslope

4-73. When computing the area of a cross section, you perform what step first?

1. Compute the slope ratio
2. Break the section down into geometric figures
3. Compute distance between stations
4. Compute elevation of the final grade

4-74. What NAVPAC publication contains equipment production rates?

1. NAVFAC P-404
2. NAVFAC P-300
3. NAVFAC P-306
4. NAVFAC P-405

4-75. In a project package, on what document is the equipment requirements to support each construction activity documented?

1. MAS sheet
2. CAS sheet
3. MTO
4. BM